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ATTORNEY DOCKET NO. 10020919-1

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Laurence Ray McColloch, et al.

Serial No.: 10/603,714

Examiner: Chandrika Prasad

Filing Date: June 25, 2003

Group Art Unit: 2839

Title: A CONNECTION CABLE THAT HAS AN INTEGRATED ELECTRICAL CONNECTOR PERMANENTLY
FIXED TO AN OPTICAL CABLE (Amended)

COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria VA 22313-1450

TRANSMITTAL OF REPLY BRIEF

Sir:

Transmitted herewith is the Reply Brief with respect to the Examiner's Answer mailed on
This Reply Brief is being filed pursuant to 37 CFR 1.193(b) within two months of the date of the Examiner's
Answer.

(Note: Extensions of time are not allowed under 37 CFR 1.136(a))

(Note: Failure to file a Reply Brief will result in dismissal of the Appeal as to the claims made subject to an expressly
stated new grounds of rejection.)

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Respectfully submitted,

Laurence Ray McColloch, et al.

By

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Date: March 29, 2004

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PATENT APPLICATION
ATTORNEY DOCKET NO. 10020919-1

**IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE**

INVENTOR(S): Laurence Ray McColloch; Brenton Arthur Baugh

CONFIRMATION NO: 3452

SERIAL NO: 10/603,714

GROUP ART UNIT: 2839

FILED: June 25, 2003

EXAMINER: Chandrika Prasad

SUBJECT: A CONNECTION CABLE THAT HAS AN INTEGRATED
ELECTRICAL CONNECTOR PERMANENTLY FIXED TO AN
OPTICAL CABLE (Amended)

COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

SIR:

REPLY BRIEF

Appellant herein replies to new points raised in the Examiner's Answer
for the above-identified case.

ARGUMENT

A. Definition of Protocol

The Examiner has cited a definition from McGraw-Hill Dictionary of
Scientific and Technical terms-Fifth Edition, Copyright 1994 that defines
protocol as: "1. A set of hardware and software interfaces in a terminal or a

computer, which allows it to transmit over a communication network. 2. See communication protocol. ”

The Examiner then asserts that in *Bucklen* a hardware for data transmission through the cable is different than a hardware used for the electrical connectors.

While Appellant recognizes that *Bucklen* discloses two types of transmission media (electrical connectors and optical transmission through a cable), this use of two types of transmission media by *Bucklen* does not disclose or suggest that different protocols are used.

While Appellant does not dispute the cited definition of protocol; nevertheless, the definition is brief and could be expanded upon.

For example, the McGraw-Hill Dictionary of Scientific and Technical Terms, cited by the Examiner, defines communication protocol as: “Procedures that enable devices within a computer network to exchange information. Also known as protocol.”

Other definitions for protocol and for communication protocol are found, for example, in The Illustrated Dictionary of Electronics — Seventh Edition, Stan Gibilisco, Editor-in-Chief, McGraw-Hill 1997. There, “protocol” is defined as “A set of parameters for a digital communications signal”. “Communication protocol” is defined as: “The specifications of digital signal, including the speed in bits per second (Bps) or bauds, the code type, the bit duration, the mark-to-space ratio, etc.”

Another definition for protocol is given by Newton's Telecom Dictionary – updated 15th Expanded Edition, by Harry Newton, 1999. There protocol is defined as follows:

A protocol is a set of rules governing the format of messages that are exchanged between computers and people. Imagine making a phone call. You pick up the phone, listen for dial tone, then punch out some buttons on your phone, then listen for ringing and for an answer. The person says "Hello." You say "Hello." Then you talk...What you're doing is following a protocol to make a call. When computers make calls between themselves – to transfer data, for example – they follow a protocol. They aren't smart like you and I. They can't distinguish between dial tone and fast busies, unless those sounds and signals are specifically defined. A protocol defines the procedure for adding order to the exchange of data (i.e. a "conversation.") A protocol is a specific set of rules, procedures or conventions relating to format and timing of data transmission between two devices. It is a standard procedure that two data devices must accept and use to be able to understand each other. The protocols for data communications cover such things as framing, error handling, transparency and line control. There are three basic types of protocol: character-oriented, byte-oriented and bit-oriented. Protocols break a file into equal parts called blocks or packets. These packets are sent and the receiving computer checks the sending computer. Because modems use phone lines to transfer data, noise or interference on the line will off mess up the block. When a block is damaged in transit, an error occurs. The purpose of a protocol is to set up a mathematical way of measuring if the block came through accurately. If it didn't ask the distant end to re-transmit the block until it gets it right. See PROTOCOLS for a list of the more common protocols. See the following protocol definitions.

Appellant is not relying on these definitions of "protocol" but is only listing them as examples of ways protocol is defined. Any technical dictionary should suffice to give a similar (at least in pertinent part) definition of protocol.

The salient point is that protocols have to do with a specific set of rules, procedures or conventions relating to format and timing of data transmission

between two devices. Protocols govern things like the format and timing of data transmission.

Protocols are not concerned with the underlying transmission media used to transmit data unless, of course, the underlying transmission media were to alter things like the format and timing of data specifically defined by a protocol.

Appellant's point, made more fully in the Appeal Brief, is that in US 2002/0159725A1 (*Bucklen*), there is no change in protocol between electrical signals and optical signals. There is merely a change in transmission media. In *Bucklen*, electrical signals are directly translated into optical signals and optical signals are directly translated into electrical signals. See Figure 3 of *Bucklen*.

Because in *Bucklen* there is a one-to-one translation of electrical to optical signals and optical to electrical signals, there is no opportunity to make a change in protocol. The transmission speed in bits per second (Bps) or bauds, the code type, the bit duration, the mark-to-space ratio, error handling, data framing and all other format and timing considerations typically defined by protocols must remain the same in *Bucklen* whether the bits are being transmitted by electricity or optics.

There is no circuitry included in *Bucklen* that would be able to make changes in framing or timing of data transmission. *Bucklen* merely discloses an electrically-terminated, optically-coupled communications cable.

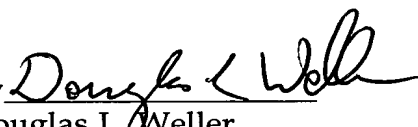
The disclosed subject matter of *Bucklen*, therefore, is pertinent only to transmission media for signals. *Bucklen* contains no teaching about protocols or use of different protocols.

In claim 1 of the present case, for example, data transmission through the optical cable uses a protocol that is different than a protocol used for data transmission between the integrated electrical connector and the matching electrical connector. This is impossible in *Bucklen*, because in *Bucklen*, electrical signals are directly translated into optical signals and optical signals are directly translated into electrical signals. See Figure 3 of *Bucklen*. There is no circuitry included in *Bucklen* that would be able to make changes in framing or timing of data transmission or to make any other type of protocol change. It is clear, therefore, that *Bucklen* does not disclose or suggest this limitation set out in claim 1.

CONCLUSION

For the reasons discussed above and all the reasons set out in the Appeal Brief, Appellant believes the rejection of the claims was in error and respectfully requests that the rejection be reversed.

Respectfully submitted,
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